

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009536**Date Inspected:** 14-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Xu Xian Ping		
Inspected CWI report:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A

CWI Present:	Yes	No
Rod Oven in Use:	Yes	No
Weld Procedures Followed:	Yes	No
Verified Joint Fit-up:	Yes	No
Approved WPS:	Yes	No
Delayed / Cancelled:	Yes	No
Component:	OBG & TOWER Components	

Bridge No: 34-0006**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Sandeep Kumar was present during the times noted above for observations relative to the work being performed.

BAY 2**Green Tags**

The following green tag issued for OBG components after completing the NDT requirements are:

1. FB3061 – 001 – 001~006; 047~096 – Green Tag # 10727
2. FB3059 – 001 – 001~006; 047~096 – Green Tag # 10725
3. FB3003 – 002 – 001~006; 047~096 – Green Tag # 10718

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint # 009 located on Floor Beam FB3010 – 001. Welder is identified as 045209.

ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

SMAW process tack welding of weld joint # 085 located on Floor Beam FB3031 – 001. Welder is identified as

WELDING INSPECTION REPORT

(Continued Page 2 of 6)

049972. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2112.

FCAW process welding of weld joint # 038 located on Floor Beam FB3010 – 001. Welder is identified as 045209.

ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4b – F.

SMAW process tack welding of weld joint # 104 located on Floor Beam FB3006 – 001. Welder is identified as 045251. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2112.

FCAW process welding of weld joint # 095 located on Floor Beam FB3003 – 003. Welder is identified as 058245.

ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – 345 – FCAW – 1G (1F) – Repair – 1.

BAY 3

Green Tags

The following green tag issued for OBG components after completing the NDT requirements are:

1. LD001 – 041 – 001 ~ 012 – Green Tag # 10855
2. LD001 – 042 – 001 ~ 012 – Green Tag # 10856
3. LD001 – 043 – 001 ~ 012 – Green Tag # 10857
4. LD001 – 044 – 001 ~ 012 – Green Tag # 10858
5. LD001 – 045 – 001 ~ 012 – Green Tag # 10859
6. LD001 – 046 – 001 ~ 012 – Green Tag # 10860
7. LD001 – 047 – 001 ~ 012 – Green Tag # 10861
8. LD001 – 048 – 001 ~ 012 – Green Tag # 10862
9. LD002 – 041 – 001 ~ 012 – Green Tag # 10863
10. LD002 – 042 – 001 ~ 012 – Green Tag # 10864
11. LD002 – 043 – 001 ~ 012 – Green Tag # 10865
12. LD002 – 044 – 001 ~ 012 – Green Tag # 10866
13. LD002 – 045 – 001 ~ 012 – Green Tag # 10867
14. LD002 – 046 – 001 ~ 012 – Green Tag # 10868
15. LD002 – 047 – 001 ~ 012 – Green Tag # 10869
16. LD002 – 048 – 001 ~ 012 – Green Tag # 10870
17. LD003 – 055 – 001 ~ 012 – Green Tag # 10871
18. LD003 – 056 – 001 ~ 012 – Green Tag # 10872
19. LD003 – 057 – 001 ~ 012 – Green Tag # 10873
20. LD003 – 058 – 001 ~ 012 – Green Tag # 10874
21. LD004 – 055 – 001 ~ 012 – Green Tag # 10875
22. LD004 – 056 – 001 ~ 012 – Green Tag # 10876
23. LD004 – 057 – 001 ~ 012 – Green Tag # 10877

WELDING INSPECTION REPORT

(Continued Page 3 of 6)

24. LD004 – 058 – 001 ~ 012 – Green Tag # 10878
25. LD005 – 011 – 001 ~ 012 – Green Tag # 10879
26. LD005 – 012 – 001 ~ 012 – Green Tag # 10880
27. LD005 – 013 – 001 ~ 012 – Green Tag # 10881
28. LD005 – 014 – 001 ~ 012 – Green Tag # 10882
29. LD007 – 011 – 001 ~ 012 – Green Tag # 10883
30. LD007 – 012 – 001 ~ 012 – Green Tag # 10884
31. LD007 – 013 – 001 ~ 012 – Green Tag # 10885
32. LD007 – 014 – 001 ~ 012 – Green Tag # 10886
33. LD009 – 009 – 001 ~ 012 – Green Tag # 10887
34. LD009 – 010 – 001 ~ 012 – Green Tag # 10888
35. LD010 – 009 – 001 ~ 012 – Green Tag # 10889
36. LD010 – 010 – 001 ~ 012 – Green Tag # 10890
37. LD015 – 035 – 001 ~ 012 – Green Tag # 10891
38. LD015 – 036 – 001 ~ 012 – Green Tag # 10892
39. LD015 – 037 – 001 ~ 012 – Green Tag # 10893
40. LD015 – 038 – 001 ~ 012 – Green Tag # 10894
41. LD016 – 035 – 001 ~ 012 – Green Tag # 10895
42. LD016 – 036 – 001 ~ 012 – Green Tag # 10896
43. LD016 – 037 – 001 ~ 012 – Green Tag # 10897
44. LD016 – 038 – 001 ~ 012 – Green Tag # 10898
45. LD017 – 023 – 001 ~ 012 – Green Tag # 10899
46. LD017 – 024 – 001 ~ 012 – Green Tag # 10900
47. LD018 – 023 – 001 ~ 012 – Green Tag # 10901
48. LD018 – 024 – 001 ~ 012 – Green Tag # 10902

This QA Inspector observed the following work in progress:

SMAW process tack welding of weld joint # 096 located on CSD5 – PP105. Welder is identified as 208567.

ZPMC QC is identified as Guo Yuan Ting. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2112.

SMAW process tack welding of weld joint # 005 located on Longitudinal Diaphragm LD010 – 011. Welder is identified as 208567. ZPMC QC is identified as Guo Yuan Ting. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2112.

BAY 5

The following NDT inspection carried out as per the ZPMC submitted Notification No. 004402

Ultrasonic Testing

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

WELDING INSPECTION REPORT

(Continued Page 4 of 6)

1. 10TR1 – 011 – 002
2. 10TR1 – 012 – 002
3. 10TR1 – 013 – 002
4. 10TR1 – 014 – 002
5. 10TR1 – 015 – 002
6. 10TR1 – 020 – 002
7. 10TR1 – 021 – 002
8. 10TR2 – 001 – 001
9. 10TR2 – 002 – 001
10. 10TR2 – 004 – 001
11. 10TR2 – 005 – 001
12. 10TR2 – 006 – 001
13. 10TR2 – 007 – 001
14. 10TR2 – 012 – 002
15. 10TR2 – 013 – 002
16. 10TR2 – 014 – 002
17. 10TR2 – 015 – 002
18. 10TR2 – 016 – 002
19. 10TR2 – 017 – 002
20. 10TR2 – 018 – 002
21. 10TR2 – 019 – 002
22. 10TR2 – 020 – 002
23. 10TR2 – 021 – 001
24. 10TR2 – 022 – 002
25. 11TR2 – 012 – 002
26. 11TR2 – 013 – 002
27. 11TR2 – 014 – 002
28. 11TR2 – 016 – 001
29. 11TR2 – 017 – 001

Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

1. 10TR1 – 011 – 002
2. 10TR1 – 012 – 002
3. 10TR1 – 013 – 002
4. 10TR1 – 014 – 002
5. 10TR1 – 015 – 002
6. 10TR1 – 020 – 002
7. 10TR1 – 021 – 002
8. 10TR2 – 001 – 001
9. 10TR2 – 002 – 001
10. 10TR2 – 004 – 001

WELDING INSPECTION REPORT

(Continued Page 5 of 6)

11. 10TR2 – 005 – 001
12. 10TR2 – 006 – 001
13. 10TR2 – 007 – 001
14. 10TR2 – 012 – 002
15. 10TR2 – 013 – 002
16. 10TR2 – 014 – 002
17. 10TR2 – 015 – 002
18. 10TR2 – 016 – 002
19. 10TR2 – 017 – 002
20. 10TR2 – 018 – 002
21. 10TR2 – 019 – 002
22. 10TR2 – 020 – 002
23. 10TR2 – 021 – 001
24. 10TR2 – 022 – 002
25. 11TR2 – 012 – 002
26. 11TR2 – 013 – 002
27. 11TR2 – 014 – 002
28. 11TR2 – 016 – 001
29. 11TR2 – 017 – 001

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint # 004 located on Bike Path BK001 – 041. Welder is identified as 204342. ZPMC QC is identified as Wang Liyang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4c – F.

FCAW process welding of weld joint # 006 located on Traveler Rail 10TR3 – 019. Welder is identified as 068918. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U5 – F.

FCAW process welding of weld joint # 008 located on Bike Path BK001 – 040. Welder is identified as 205390. ZPMC QC is identified as Wang Liyang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4c – F.

BAY 6

The following NDT inspection carried out as per the ZPMC submitted Notification No. 004400

Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as TOWER Components. The weld designations reviewed are as follows:

NORTH TOWER LIFT 1 – 135M DIAPHRAGM – GREEN TAG # 009256

NSD1 – DPSA4 – 7A/B – 3 ~ 8

WELDING INSPECTION REPORT

(Continued Page 6 of 6)

NSD1 – DPSA4 – 7B/B – 1 ~ 27

NSD1 – SA4 – 52 – 3 ~ 8

NORTH TOWER LIFT 1 – 139M DIAPHRAGM – GREEN TAG # 009257

NSD1 – DPSA4 – 19A/B – 3 ~ 8

NSD1 – DPSA4 – 19B/B – 1 ~ 27

NSD1 – SA4 – 55 – 3 ~ 8

NORTH TOWER LIFT 1 – 119M DIAPHRAGM – GREEN TAG # 009255

NSD1 – DPSA4 – 14A/B – 3 ~ 8

NSD1 – DPSA4 – 14B/B – 1 ~ 27

NSD1 – SA4 – 53 – 3 ~ 8

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No Relevant Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang - 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Kumar,Sandeep

Quality Assurance Inspector

Reviewed By: Hall,Steven

QA Reviewer